

REMARKS

Reconsideration of this application as amended is respectfully requested.

In the Office Action, claims 1-21 were pending. Claims 1-21 were rejected. Portions of the specification and drawings were objected.

In this response, no claim has been canceled. Claims 1-10, 15, 18, and 20 have been amended. New claims 22-44 have been added. Thus, claims 1-44 remain pending. Portions of the specification and drawings have been amended. Formal drawings have been submitted. No new matter has been added.

Claims 18-19 are objected to because the informalities. Claims 2-3, 5-6, and 8-9 are rejected under 35 U.S.C. 112, first paragraph. Claims 18-19 are rejected under 35 U.S.C. 112, second paragraph. In view of the foregoing amendments, it is respectfully submitted that the rejections have been overcome.

Claims 1, 4, 7, and 10-21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,668,090 by Joshi et al (“Joshi”) and the Article entitled “JPEG2000 Image Coding System” (“JPEG2000”). It is respectfully submitted that claims 1-44 as amended include limitations that are not disclosed by Joshi. Specifically, independent claim 1 as amended recites as follows:

1. A method comprising:  
coding of each tile of an input codestream into a plurality of layers;  
outputting, as a part of a first pass, a plurality of packets of said each tile to an output codestream as a first complete tile-part, the first complete tile-part representing a first layer of the plurality of layers;  
storing remaining layers of said each tile in a buffer; and  
outputting, as a part of a second pass, additional packets of said each tile from the remaining layers as a second complete tile-part if remaining unused bandwidth of the output codestream is available based on a desired bandwidth of the output codestream.

(Emphasis added)

Independent claim 1 includes limitations that each tile of an input codestream is encoded into multiple layers. The first layer is output to the output code stream during a first pass. Subsequently, if the bandwidth of the output codestream has not been fully utilized (e.g., within a given rate and/or time), one or more remaining layers stored in a buffer may be transmitted to the output codestream to fully utilize the remaining unused bandwidth of the output codestream. The above limitations are not absent from Joshi and JPEG2000.

Although JPEG2000 discloses outputting codestream tile-part by tile-part, JPEG2000 fails to disclose coding the input codestream into multiple layers, where the first layer is output to the output codestream during the first pass while the remaining layers may be output to the output codestream provided the remaining unused bandwidth of the output code stream is still available. Therefore, for the reasons discussed above, it is respectfully submitted that independent claim 1 is not anticipated by Joshi or JPEG2000.

Similarly, independent claims 4 and 7 include limitations similar to those recited in claim 1. Thus, for the reasons similar to those discussed above, independent claims 4 and 7 are not anticipated by Joshi or JPEG2000.

Given that dependent claims 2-3, 5-6, 8-9, and 22-29 depend from one of the above independent claims, at least for the reasons similar to those discussed above, it is respectfully submitted that claims 2-3, 5-6, 8-9, and 22-29 are not anticipated by the cited references.

Independent claim 10 as amended recites as follows:

10. A method comprising:  
compressing a bitstream to create an original compressed codestream;  
performing rate control on the original compressed codestream to create a new compressed codestream in response to a request by selecting a number of layers to remain in the codestream, including a parser using a packet structure containing a selection flag and setting a selection flag for each packet of the original codestream to a predetermined value to indicate whether said each packet is to be included in the new compressed codestream,

wherein the packet structure is a member of an array of packet structures, each of the packet structures in the array corresponding to each of the layers of each tile in the original compressed codestream.

(Emphasis Added)

Independent claim 10 includes performing a rate control operation on a compressed codestream by selecting layers of each tile using a packet structure having a selection flag, where the packet structure is a member of an array of packet structures and each of the packet structure corresponds to each of the layers of each tile in the compressed codestream. It is respectfully submitted that the above limitations are absent from Joshi or JPEG2000.

Although Joshi uses a truncation point to specify the location of the data being cut, such a truncation point is not a packet structure, particularly, a selection flag within a packet structure (e.g., a member of the packet structure). In addition, such a truncation point is not a member of an array of packet structures, where each of the packet structure corresponds to each of the layers of each tile in the compressed codestream. Therefore, for the reasons discussed above, it is respectfully submitted that independent claim 10 is not anticipated by Joshi or JPEG2000.

Similarly, independent claims 15 and 20 include limitations similar to those recited in claim 10. Thus, for the reasons similar to those discussed above, independent claims 15 and 20 are not anticipated by Joshi or JPEG2000.

Given that dependent claims 11-14, 16-19, 21, and 30-44 depend from one of the above independent claims, at least for the reasons similar to those discussed above, it is respectfully submitted that claims 11-14, 16-19, 21, and 30-44 are not anticipated by the cited references. Withdrawal of the rejections is respectfully requested.

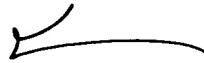
In view of the foregoing, Applicant respectfully submits the present application is now in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned attorney at (408) 720-8300.

Please charge Deposit Account No. 02-2666 for any shortage of fees in connection with this response.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 5/28/01

  
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